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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,755	11/09/2001	Klaus Koppenhofer	31713-175916	6001
	7590	12/09/2004	EXAMINER	
VANABLE P.O. Box 34385 Washington, DC 20043-9998			NGUYEN, THUKHANH T	
			ART UNIT	PAPER NUMBER
			1722	

DATE MAILED: 12/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/986,755

Applicant(s)

KOPPENHOFER, KLAUS

Examiner

Thu Khanh T. Nguyen

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 1 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date ---
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of group II, claims 2-13 in the reply filed on October 12, 2003 is acknowledged.

### ***Information Disclosure Statement***

2. The information disclosure statement filed March 23, 2004 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 6-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitation "such rods" in line 3. There is insufficient antecedent basis for this limitation in the claim. Clarification and/or correction are required.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 2-10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by the UK Patent (2 079 668).

The UK Patent ('668) teaches an apparatus for forming thermoplastic beaker, comprising an upper tool (60) having a compressed air supply (60a), a lower tool part having at least one blank punch (36) and a shaping part (40), which has an inwardly directed pinched edge (40a) extending around the inner wall of the shaping part, an axially displaceable mold floor (52b) extending around the inner wall of the shaping part, an axially displaceable mold floor (52b) movable between a first position (Fig. 1, 52) and a second position (Fig. 2, 52), an axially displaceable sealing bell (50) surrounding the periphery of the mold floor in the raised position (Fig. 2, 40, 50, 52), a drive (50 c-d) for driving the sealing bell.

In regard to claims 3-10 and 12, the UK reference's apparatus further comprises that the mold floor (52b) and the sealing bell (50) are guided axially relative to one another (Figs. 1-2; 50, 52); a retaining plate (Fig. 1, 50d) connected to a piston (50c) that is displaced in a bore of a base plate for the lower part of the tool (30, 32); wherein the mold floor (52b) is attached to a rod (52c) that is rigidly connected to an ejector plate (52) for moving the mold floor (Fig. 3, 52, 52b, 52c); a carrier plate connected to and for supporting the piston and the rod (Figs. 1-3, 30); and wherein blank punch has a cutting edge (Fig. 1, the top edge of blank punch 35).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the UK patent ('668) as applied to claims 2-10 and 12 above, and further in view of Yaita et al (4,758,394).

In regard to claim 10, The UK patent discloses a sheet thermoforming apparatus as described above, but fails to disclose that the blank punch and the shaping parts are integrally formed as one piece. Yaita et al disclose an apparatus for forming cups from thermoplastic material, comprising an integral piece of blank punch and shaping parts (20, 30). It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify the UK reference by providing an integral piece of blank punch and the shaping parts as taught by Yaita et al in order to prevent part-misalignment problems.

In regard to claim 13, the UK reference fails to disclose that the ring of the shaping part comprises hardened steel. Yaita et al disclose that the male and female molds are made of stainless steel (col. 7, line 37-38). It would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to modify the UK reference by providing the ring comprises stainless steel as taught by Yaita et al, because the stainless steel would improve the hardness and thermo conductivity of the shaping ring.


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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Khanh T. Nguyen whose telephone number is 571-272-1136. The examiner can normally be reached on Monday- Friday, 6:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin L. Utech can be reached on 571-272-1137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TN

  
BENJAMIN L. UTECH  
SUPERVISORY PATENT EXAMINER  
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